

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

<b>WSOU INVESTMENTS, LLC D/B/A</b>	<b>§</b>	<b>CIVIL ACTION 6:20-cv-00571-ADA</b>
<b>BRAZOS LICENSING AND</b>	<b>§</b>	<b>CIVIL ACTION 6:20-cv-00578-ADA</b>
<b>DEVELOPMENT,</b>	<b>§</b>	<b>CIVIL ACTION 6:20-cv-00583-ADA</b>
<i>Plaintiff,</i>	<b>§</b>	<b>CIVIL ACTION 6:20-cv-00584-ADA</b>
	<b>§</b>	
<b>v.</b>	<b>§</b>	
	<b>§</b>	
<b>GOOGLE LLC,</b>	<b>§</b>	
<i>Defendant.</i>	<b>§</b>	

**PLAINTIFF’S OPENING CLAIM CONSTRUCTION BRIEF**

## TABLE OF CONTENTS

Table of Contents .....	ii
Table of Authorities .....	iii
Exhibits .....	v
I. LEGAL STANDARDS .....	1
A. General Claim Construction Principles .....	1
B. Means-Plus-Function Claiming .....	2
C. Indefiniteness .....	3
II. U.S. PATENT NO. 7,777,728 (Case No. 6:20-cv-00583-ADA) .....	4
A. Disputed Term .....	4
1. “tap direction” (Claims 1, 11, 16) .....	4
III. U.S. PATENT NO. 7,817,585 (Case No. 6:20-cv-00571-ADA) .....	5
IV. U.S. PATENT NO. 8,803,697 (Case No. 6:20-cv-00584-ADA) .....	5
V. U.S. PATENT NO. 9,335,825 (Case No. 6:20-cv-00578-ADA) .....	6
A. Disputed Term .....	6
1. “continuous wave doppler radar” (Claims 1 and 19) .....	6
2. “at least one memory and the computer program code are configured, with the at least one processor, to cause the apparatus to at least: detect that an application is being started on the apparatus; in response to the application being started on the apparatus, turn on a continuous wave doppler radar at the apparatus” (Claim 1) .....	8

## TABLE OF AUTHORITIES

## Cases

<i>3M Innovative Props. Co. v. Tredegar Corp.</i> , 725 F.3d 1315 (Fed. Cir. 2013).....	2
<i>Comark Commc'ns, Inc. v. Harris Corp.</i> , 156 F.3d 1182 (Fed. Cir. 1998).....	1
<i>Cont'l Circuits LLC v. Intel Corp.</i> , 915 F.3d 788 (Fed. Cir.).....	4
<i>Diebold Nixdorf, Inc. v. Int'l Trade Comm'n</i> , 899 F.3d 1291 (Fed. Cir. 2018).....	2, 3, 8
<i>Home Diagnostics, Inc. v. LifeScan, Inc.</i> , 381 F.3d 1352 (Fed. Cir. 2004).....	1
<i>LG Electronics, Inc. v. Bizcom Electronics, Inc.</i> , 453 F.3d 1364 (Fed. Cir. 2006).....	8, 9
<i>Liebel-Flarsheim Co. v. Medrad, Inc.</i> , 358 F.3d 898 (Fed. Cir. 2004).....	1
<i>Mangosoft, Inc. v. Oracle Corp.</i> , 525 F.3d 1327 (Fed. Cir. 2008).....	2
<i>Nautilus, Inc. v. Biosig Instruments, Inc.</i> , 572 U.S. 898 (2014).....	3
<i>Noah Sys., Inc. v. Intuit Inc.</i> , 675 F.3d 1302 (Fed. Cir. 2012).....	3
<i>Old Town Canoe Co. v. Confluence Holdings Corp.</i> , 448 F.3d 1309 (Fed. Cir. 2006).....	2
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005).....	1
<i>Power Mosfet Techs., L.L.C. v. Siemens AG</i> , 378 F.3d 1396 (Fed. Cir. 2004).....	5
<i>Sonix Tech. Co. v. Publ'ns Int'l, Ltd.</i> , 844 F.3d 1370 (Fed. Cir. 2017).....	3
<i>Tex. Instruments, Inc. v. U.S. Int'l Trade Comm'n</i> , 988 F.2d 1165, 1171 (Fed. Cir. 1993) .....	5
<i>Thorner v. Sony Computer Entm't Am. LLC</i> , 669 F.3d 1362 (Fed. Cir. 2012).....	2
<i>Virginia Innovation Scis., Inc. v. Amazon.com, Inc.</i> , 4:18-CV-474, 2019 WL 4259020 (E.D. Tex. Sept. 9, 2019) .....	9
<i>Vitronics Corp. v. Conceptronic, Inc.</i> , 90 F.3d 1576 (Fed. Cir. 1996).....	2

<i>Williamson v. Citrix Online, LLC</i> , 792 F.3d 1339 (Fed. Cir. 2015).....	2, 3
--	------

**Statutes**

36 U.S.C. § 112.....	2
----------------------	---

**EXHIBITS**

<b>Exhibit</b>	<b>Description</b>
<b>A</b>	Wikipedia, Continuous Wave Radar, <a href="https://web.archive.org/web/20120418124039/http://en.wikipedia.org:80/wiki/Continuous-wave_radar">https://web.archive.org/web/20120418124039/http://en.wikipedia.org:80/wiki/Continuous-wave_radar</a> (archived Apr. 18, 2012)
<b>B</b>	Federation of American Scientists, ES310: Introduction to Naval Weapons Engineering Course Syllabus, Lesson 10: Continuous Wave Radar, <a href="https://web.archive.org/web/20091227095356/https://fas.org/man/dod-101/navy/docs/es310/cwradar/cwradar.htm">https://web.archive.org/web/20091227095356/https://fas.org/man/dod-101/navy/docs/es310/cwradar/cwradar.htm</a> (archived Dec. 27, 2009)

Plaintiff WSOU Investments, LLC d/b/a Brazos License and Development (“WSOU”) submits the following Opening Claim Construction Brief pursuant to the Orders Governing Proceedings and Scheduling Orders in the above-listed cases.

## **I. LEGAL STANDARDS**

### **A. General Claim Construction Principles**

Generally, claim terms are given their plain and ordinary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc); *accord Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1355 (Fed. Cir. 2004) (citations and quotations omitted) (“[N]ormal rules of usage create a ‘heavy presumption’ that claim terms carry their accustomed meaning in the relevant community at the relevant time.”). The plain and ordinary meaning of a term is the “meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Philips*, 415 F.3d at 1313.

“Although the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)). In particular, “it is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

When construing claim terms, courts may also consult extrinsic evidence, including dictionaries. *See Phillips*, 415 F.3d at 1319. But extrinsic evidence is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Id.*, 415 F.3d at

1317 (quoting *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)). Extrinsic evidence should only be used to help the court come to the proper understanding of the claims; the ultimate construction given to the claims should be grounded in the intrinsic evidence. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1584 (Fed. Cir. 1996); *Mangosoft, Inc. v. Oracle Corp.*, 525 F.3d 1327, 1329-30 (Fed. Cir. 2008); *Old Town Canoe Co. v. Confluence Holdings Corp.*, 448 F.3d 1309, 1316 (Fed. Cir. 2006).

The “only two exceptions to [the] general rule” that claim terms are construed according to their plain and ordinary meaning are when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution. *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). To act as his/her own lexicographer, the patentee must “clearly set forth a definition of the disputed claim term,” and “clearly express an intent to define the term.” *Id.* To disavow the full scope of a claim term, the patentee's statements in the specification or prosecution history must represent “a clear disavowal of claim scope.” *Id.* at 1366. Accordingly, when “an applicant's statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.” *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

## **B. Means-Plus-Function Claiming**

A patent claim may be expressed using functional language. *See* 36 U.S.C. § 112(f); *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347–49 (Fed. Cir. 2015). The lack of means-plus-function language creates a presumption that the term is not a means-plus-function term. means-plus-function term. *Diebold Nixdorf, Inc. v. Int'l Trade Comm'n*, 899 F.3d 1291, 1298 (Fed. Cir. 2018). In order to overcome this presumption, a party must demonstrate that “the claim term

fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *Id.*

### **C. Indefiniteness**

The Patent Act requires claims to particularly point out and distinctly claim the subject matter regarded as the inventions. 35 U.S.C. § 112, ¶ 2. To satisfy this requirement, the claim must be read in light of the intrinsic evidence to determine whether it informs one of skill in the art at the time of the invention “about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910-11 (2014). To establish that a claim is indefinite, a patent challenger must prove indefiniteness by clear and convincing evidence. *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

In the context of a claim governed by 35 U.S.C. § 112, 6, the claim is indefinite if the claim fails to disclose adequate corresponding structure to perform the claimed functions. *Williamson*, 792 F.3d at 1351–52. The disclosure is inadequate when one of ordinary skill in the art “would be unable to recognize the structure in the specification and associate it with the corresponding function in the claim.” *Id.* at 1352. Computer-implemented means-plus-function claims are indefinite unless the specification discloses an algorithm to perform the function associated with the limitation. *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1319 (Fed. Cir. 2012)



## II. U.S. PATENT NO. 7,777,728 (CASE NO. 6:20-CV-00583-ADA)

### A. Disputed Term

#### 1. “tap direction” (Claims 1, 11, 16)

WSOU’s Proposed Construction	Google’s Proposed Construction
Plain and ordinary meaning	tap direction that extends between the first tap position and a second tap position

The term “tap direction” requires no construction for the following reasons.

**First**, Google does not attempt to construe the term “tap direction” itself but instead adds extra limitations that were not selected by the patentee in drafting the claims. Adding limitations neither required by claim terms nor unambiguously required by either the specification or the prosecution history of a patent is impermissible. *See, e.g., Cont’l Circuits LLC v. Intel Corp.*, 915 F.3d 788, 796–97 (Fed. Cir.), *cert. denied*, 140 S. Ct. 648 (2019); *Dayco Prods., Inc. v. Total Containment, Inc.*, 258 F.3d 1317, 1327 (Fed. Cir. 2001).

**Second**, Google’s proposed construction conflicts with the surrounding claim language. Claim 1, for instance, recites “defining a candidate area that has a configuration that is dependent upon *a tap direction that extends between the first position and a second position*, wherein the second position is a position of a previously detected touch of a second key of the touch sensitive display.” The italicized claim language in the previous sentence is identical *except that* Google attempts to convert “first position” and “second position” to “first *tap* position” and “second *tap* position,” respectively. Claim 1 recites that the “second position” is “a position of a previously detected touch of a second key of the touch sensitive display.” Indeed, Google’s newly-created phrases—“first *tap* position,” “second *tap* position,” and even “*tap* position”—are not recited in the claims and do not appear in the specification. The Court should give effect to the terms chosen by the patentee; and the Court should reject Google’s proposed construction for the “tap direction”

terms as deviating from the plain and ordinary meaning, conflicting with the intrinsic evidence, and erroneously rewriting the claims. *See, e.g., K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999) (“Courts do not rewrite claims; instead, we give effect to the terms chosen by the patentee.”); *Tex. Instruments, Inc. v. U.S. Int’l Trade Comm’n*, 988 F.2d 1165, 1171 (Fed. Cir. 1993) (“[C]ourts can neither broaden nor narrow claims to give the patentee something different than what he has set forth.”).

**Third**, removing the improper word “tap” is removed before “position” in Google’s construction, the remainder of Google’s construction would render the remainder of the surrounding claim language superfluous. As noted above, claim recites “*a tap direction that extends between the first position and a second position.*” The underlined language in Google’s construction “tap direction that extends between the first tap position and a second tap position” would render the claim language superfluous. is no need to define “tap direction” with other surrounding claim language. *Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1410 (Fed. Cir. 2004) (“interpretations that render some portion of the claim language superfluous are disfavored.”).

### **III. U.S. PATENT NO. 7,817,585 (CASE NO. 6:20-CV-00571-ADA)**

Neither party currently contends that any terms of the ‘585 patent require construction.

### **IV. U.S. PATENT NO. 8,803,697 (CASE NO. 6:20-CV-00584-ADA)**

Neither party currently contends that any terms of the ‘697 patent require construction.

V. U.S. PATENT NO. 9,335,825 (CASE NO. 6:20-CV-00578-ADA)

A. Disputed Term

1. “continuous wave doppler radar” (Claims 1 and 19)

WSOU’s Proposed Construction	Google’s Proposed Construction
Plain and ordinary meaning	a Doppler radar that emits an uninterrupted electromagnetic signal

The term “continuous wave doppler radar” requires no construction for the following reasons.

*First*, as an initial matter, Google’s inclusion of the phrase “Doppler radar” in its proposed construction is the same language that appears in a portion of the claim itself. The parties thus agree that the plain and ordinary meaning of “doppler radar” should govern.

*Second*, Google effectively proposes that the claim language “continuous wave” be construed as something that “emits an uninterrupted electromagnetic signal.” Google’s proposed construction conflicts with the intrinsic evidence. Namely, both the specification and claims lack any reference to the word “uninterrupted” or “interrupted” (or any form of those words). Rather, the specification first introduces the generic concept of a “Doppler radar detector.” ’825 patent at 4:19. And then the specification describes two types of Doppler radar detectors: continuous wave and pulse. *Id.* at 4:23-24 (“The Doppler radar does not have to be on continuously and may be pulsed to save power.”) Therefore, distinction is between “continuous wave” and “pulse,” not the concept of “uninterrupted” as Google contends.

*Third*, while it is not entirely clear what Google intends by “uninterrupted,” if the Court were to adopt Google’s construction, it could be misapplied to carve out one particular type of “continuous wave” doppler radar that is described in the specification—namely, the “Frequency Modulated Continuous Wave” (FMCW) where the “time signature” may have a “period variation

in frequency.” *Id.* at 4:33-36 (“The time signature may, for example, be ... a periodic variation in frequency (Frequency Modulated Continuous wave).”) The art recognizes FMCW as a subtype of continuous wave radars. Wikipedia, Continuous Wave Radar, [https://web.archive.org/web/20120418124039/http://en.wikipedia.org:80/wiki/Continuous-wave\\_radar](https://web.archive.org/web/20120418124039/http://en.wikipedia.org:80/wiki/Continuous-wave_radar) (archived Apr. 18, 2012) (**Ex. A**) (listing Frequency Modulated Continuous Wave radar as a subtype of Continuous Wave Radar); Federation of American Scientists, ES310: Introduction to Naval Weapons Engineering Course Syllabus, Lesson 10: Continuous Wave Radar, <https://web.archive.org/web/20091227095356/https://fas.org/man/dod-101/navy/docs/es310/cwradar/cwradar.htm> (archived Dec. 27, 2009) (**Ex. B**) (same).listing Frequency Modulated Continuous Wave radar as a subtype of Continuous Wave Radar).<sup>1</sup>

---

<sup>1</sup> To be clear, WSOU does not contend that the cited extrinsic evidence should define or otherwise limit the meaning of “continuous wave doppler radar.” Both pieces of extrinsic evidence are merely cited as evidence of how Google’s construction fails to encompass the full scope of the plain and ordinary meaning.

2. “at least one memory and the computer program code are configured, with the at least one processor, to cause the apparatus to at least: detect that an application is being started on the apparatus; in response to the application being started on the apparatus, turn on a continuous wave doppler radar at the apparatus” (Claim 1)

WSOU’s Proposed Construction	Google’s Proposed Construction
Plain and ordinary meaning. 35 U.S.C. § 112, ¶6 does not apply.	<p>This term is subject to means-plus-function treatment under 35 U.S.C. § 112, ¶ 6.</p> <p><b>Function:</b> detect that an application is being started on the apparatus; in response to the application being started on the apparatus, turn on a continuous wave doppler radar at the apparatus</p> <p><b>Structure:</b> none (indefinite).</p>

The term above-listed term requires no construction for the following reasons.

**First**, lack of means-plus-function language creates a presumption that the term is not a means-plus-function term. *Diebold*, 899 F.3d at 1298. In order to overcome this presumption, Google will need to demonstrate that “the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *Id.*

**Second**, Google cannot overcome the presumption because the claim itself recites sufficient structure, namely “at least one memory and the computer program code are configured, with at least one processor, to cause the apparatus.” *See LG Electronics, Inc. v. Bizcom Electronics, Inc.*, 453 F.3d 1364, 1372 (Fed. Cir. 2006), cert. granted, 128 S. Ct. 28 (U.S. 2007) (ruling that term “control unit” in a claim limitation reciting “a control unit for controlling the communication unit, wherein the control unit comprises a [central processing unit (‘CPU’)] and a partitioned memory system” was not a means-plus-function limitation) *rev’d on other grounds sub nom.* In *LG*, the Federal Circuit held that the presumption was not overcome because the “claim itself provides sufficient structure, namely ‘a CPU and a partitioned memory system,’ for performing the stated function,

‘controlling the communication unit.’” Here, similar to *LG*, the claim itself provides sufficient structure including memory and a processor. *See id.*

**Third**, the term “program code” connotes specific structure in view of the detailed functional tasks recited in the body of the claim that the code had to accomplish. *See Virginia Innovation Scis., Inc. v. Amazon.com, Inc.*, 4:18-CV-474, 2019 WL 4259020, at \*30-32 (E.D. Tex. Sept. 9, 2019). In *Virginia Innovative*, the district court found that the presumption was not overcome where the claim language recited “a *memory* configured to store *program code* that includes instructions executable by said processor, said instructions comprising ....[reciting over a half dozen specific functional tasks].” Here, just as in *Virginia Innovative*, the claim language recites structure (*e.g.*, the memory, program code, and processor) that then performs a specific set of functional tasks (*e.g.*, the six functional tasks recited after “to cause the apparatus to at least”).

**Fourth**, to the extent the preamble invokes § 112, ¶6 (WSOU contends that it does not), Google is improperly identifying the function by combining two separate elements that the apparatus performs. This is evident from claim 1 as formatted, the relevant portion of which is reproduced below:

1. An apparatus comprising:  
 at least one processor; and  
 at least one memory including computer program code,  
 where the at least one memory and the computer program  
 code are configured, with the at least one processor, to cause  
 the apparatus to at least:  
     detect that an application is being started on the apparatus;  
     in response to the application being started on the appa-  
     ratus, turn on a continuous wave doppler radar at the  
     apparatus and transmit radio signals that comprise the  
     continuous wave doppler radar, wherein the radio sig-  
     nals are at least partially reflected by a human body of a  
     user of the apparatus;

’825 patent at 10:29-41.

The element “detect that an application is being started on the apparatus” is recited separately from

the next element that starts “in response to the application being started on the apparatus, turn on a continuous wave doppler wave radar at the apparatus and transmit radio signals that comprise the continuous wave doppler radar ...” Google has not explained why it has arbitrarily combined these two elements and also ignores that language “and transmit radio signals that comprise the continuous wave doppler radar...” Nor has Google explained why in identifying this element, Google has omitted the colon between “the apparatus to at least” and “detect that an application is being started....” WSOU has listed the term above as recited in claim 1.

Dated: January 22, 2021

Respectfully submitted,

By: /s/ Ryan Loveless  
James L. Etheridge  
Texas Bar No. 24059147  
Ryan S. Loveless  
Texas Bar No. 24036997  
Brett A. Mangrum  
Texas Bar No. 24065671  
Travis L. Richins  
Texas Bar No. 24061296  
Jeffrey Huang  
Brian M. Koide  
Etheridge Law Group, PLLC  
2600 E. Southlake Blvd., Suite 120 / 324  
Southlake, TX 76092  
Tel.: (817) 470-7249  
Fax: (817) 887-5950  
Jim@EtheridgeLaw.com  
Ryan@EtheridgeLaw.com  
Brett@EtheridgeLaw.com  
Travis@EtheridgeLaw.com  
Jhuang@EtheridgeLaw.com  
Brian@EtheridgeLaw.com

Mark D. Siegmund  
State Bar No. 24117055  
mark@waltfairpllc.com  
Law Firm of Walt, Fair PLLC.  
1508 North Valley Mills Drive  
Waco, Texas 76710  
Telephone: (254) 772-6400  
Facsimile: (254) 772-6432

*Counsel for Plaintiff WSOU Investments, LLC*

**CERTIFICATE OF SERVICE**

A true and correct copy of the foregoing instrument was served or delivered electronically via U.S. District Court [LIVE]- Document Filing System, to all counsel of record, on January 22, 2021.

/s/ James L. Etheridge

James L. Etheridge